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DEPARTMENT OF THE NAVY SUICIDE INCIDENT REPORT (DONSIR): SUMMARY OF 1999–2002 FINDINGS

V. A. Stander S. M. Hilton K. R. Kennedy T. Gaskin

Report No. 04-19

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NAVAL HEALTH RESEARCH CENTER P. O. BOX 85122 SAN DIEGO, CA 92186-5122



BUREAU OF MEDICINE AND SURGERY (M2) 2300 E ST. NW WASHINGTON, DC 20372-5300

Department of the Navy Suicide Incident Report (DONSIR): Summary of 1999–2002 Findings

> Valerie A. Stander, Ph.D. Susan M. Hilton, M.A.

Behavioral Science and Epidemiology Naval Health Research Center P.O. Box 85122 San Diego, CA 92186-5122

Kevin R. Kennedy, CDR, USN Suicide Prevention Program Manager Naval Personnel Command Millington, TN

Thomas Gaskin, CDR, USN Suicide Prevention Program Manager Headquarters, U.S. Marine Corps Quantico, VA

Report No. 04-19, supported by the Behavioral Health Branch of the Navy Personnel Command and by the Office of Prevention and Intervention, Headquarters, United States Marine Corps, under research work unit 6821. The views expressed in this report are those of the authors and do not reflect the official policy or position of the Department of the Navy, the Department of Defense, or of the U.S. Government. Approved for public release; distribution unlimited. This research has been conducted in compliance with all applicable Federal Regulations governing the protection of human subjects in research.

SUMMARY

Problem: Since 1999, the Department of the Navy (DON) has conducted an extensive suicide

surveillance program, using the DON Suicide Incident Report (DONSIR) to collect data on completed suicides in the U.S. Navy (USN) and Marine Corps (USMC). The long-term goal of this program is to improve suicide prevention by identifying and modifying military-specific risk factors. The DONSIR significantly improves the capability of the DON to track and analyze data on completed suicides. It provides the DON with consistent data that can be compared across both the USN and the USMC. It establishes baselines for suicide rates and suicide event characteristics that can be used to track trends over time. It also evaluates military-specific correlates of suicide, which cannot be evaluated using civilian, academic literature. Objective: This is the fourth annual report on the DONSIR. The objectives are to present findings from the data collected since the program was initiated in 1999 and to summarize the conclusions and recommendations that can be drawn based on the results to date. Approach: Completion of the DONSIR is a DON requirement in the event of a completed suicide by any active-duty member (Navy Personnel Command, 2002; U.S. Marine Corps, 2001). The Suicide Prevention Program Managers for each service send an informational cover letter, service-specific instructions, and a copy of the DONSIR to each decedent's command. That command is to assign a point of contact to complete the report within 3-4 weeks of receipt and return it to the Program Manager. DONSIRs are then forwarded to the Naval Health Research Center for data entry and analysis.

Results: Between 1999 and 2002, there were 165 completed suicides among active-duty USN personnel and 96 in the USMC. The average yearly suicide rate (suicides per 100,000 personnel) from 1999 to 2002 was 10.7 for the USN and 13.2 for the USMC.

Decedent Demographic Profile

- Suicide rates were significantly higher among men than among women.
- There were no significant differences in suicide rates based on age or race.

Decedent Career Profile

- The suicide rate for officers was significantly lower than the rate for enlisted personnel.
- There were no significant differences in suicide rates based on regular/reserve status, length of service, or enlisted paygrade.

Suicide Event Characteristics

- There were no significant differences in duty status at time of suicide, method of suicide, location of suicide, or use of alcohol comparing USN with USMC personnel or comparing decedents across calendar years.
- Thirty percent of USN decedents were assigned to a ship or submarine. USMC personnel are not assigned to ships or submarines.
- Significantly more USN than USMC decedents had been deployed within the 3 years prior to suicide, but USN (5%) and USMC (4%) decedents were equally likely to be deployed at time of suicide.
- Most suicides took place while decedents were on liberty and occurred at a residence.
- The most common method of suicide was the use of a firearm. However, decedents who were on government property at the time of suicide were more likely to choose hanging.

Risk Factors for Suicide

- There were no significant differences by service in the total number of key suicide risk factors or recent associated stressors reported for decedents.
- The key risk factors most commonly noted in the DONSIR were depression, a history of mental health problems, feelings of anxiety, feelings of guilt, and evidence of alcohol abuse within the previous year.
- The five most commonly noted associated stressors were problems in a primary romantic relationship, physical health problems, job dissatisfaction, other work issues such as poor performance, and pending military legal or disciplinary action.
- Multiple key risk factors and associated stressors were common among decedents. There was evidence for 10 or more among a third of them (32%).

Recent Service Use

- There were no significant differences in the number of support services accessed comparing USMC and USN decedents.
- For 66% of decedents, there was no evidence they had accessed support services within the 30 days prior to suicide.
- The most common type of service used in the 30 days prior to suicide was outpatient medical care. Mental health counseling and the chaplain service followed this.

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INTRODUCTION

Since 1999, the Department of the Navy (DON) has conducted an extensive suicide surveillance program, using the DON Suicide Incident Report (DONSIR) to collect data on completed suicides in the Navy (USN) and Marine Corps (USMC) (Hourani & Hilton, 1999; Hourani, Hilton, Kennedy, & Jones, 2000; Hourani, Hilton, Kennedy, & Robbins, 2001; Jones et al., 2001; Stander, Hilton, Kennedy, & Robbins, 2004). The long-term goal of this program is both to provide military leadership and public affairs personnel with accurate and detailed information regarding suicide trends within the DON and to improve suicide prevention by identifying and modifying military-specific risk factors for suicide. The DONSIR significantly improves the capability of the DON to track and analyze data on completed suicides. It provides the DON with consistent data that can be compared across both the USN and the USMC. It establishes baselines for suicide rates and suicide event characteristics that can be used to track trends over time. It also evaluates military-specific correlates of suicide, which cannot be evaluated using the civilian, academic literature. The DONSIR's focus on military-specific risk factors is important because military personnel are not representative of the U.S. population. Differences in gender, race, age, health, and employment may be related to unique correlates of suicide among active-duty personnel. The structure of the military may also facilitate initiating policies and procedures to address risk factors that cannot be addressed among civilians.

METHODS

Instrument

The DONSIR is divided into sections covering information about the (1) point of contact (POC) assigned to complete the report, (2) demographic characteristics of the decedent and the circumstances of the suicide event, (3) military service history of the decedent, (4) health and medical history of the decedent, (5) risks factors for suicide evident within the year prior to the suicide event, and (6) recent use of support services by the decedent. It also includes a section for (7) narrative accounts of interviews with the decedent's military associates, (8) a narrative summary by the POC regarding the circumstances surrounding the suicide event, and (9) POC feedback regarding the process of completing the DONSIR (Hourani & Hilton, 1999; Hourani et al., 2000; Hourani et al., 2001). Questions in the first 6 sections of the DONSIR primarily have a quantitative format, but in the final three sections are more open-ended to collect narrative information summarizing relevant stressors and chronological events preceding the suicide.

Information from these narratives can be used to clarify responses to quantitative items and to revise the quantitative sections of the DONSIR over time.

Procedure

Completion of the DONSIR is both a USN and a USMC requirement in the event of any death documented as a suicide on the Department of Defense Report of Casualty form DD 1300 (Navy Personnel Command, 2002; U.S. Marine Corps, 2001). The Suicide Prevention Program Managers for each service send an informational cover letter, service-specific instructions, and a copy of the DONSIR to each decedent's command. That command is to assign a POC within 3 days of the Report of Casualty at a USMC command or within 3 days of receipt of the DONSIR at a USN command. POCs are directed to complete the report within 3-4 weeks. Program Managers are available to answer questions throughout the process of filling out the DONSIR. POCs return the completed form to their respective Program Manager. DONSIRs are then forwarded to the Naval Health Research Center for data entry and analysis.

The primary sources for the information requested by the DONSIR are the decedents' military service and medical records (Hourani & Hilton, 1999; Hourani et al., 2000; Hourani et al., 2001). Recommended additional sources that are sometimes available include counseling records, autopsy reports, toxicology reports, investigative reports, and interviews with military personnel who were the decedents' recent associates or who participated in the casualty management process (e.g., the Casualty Assistance Calls Officer). POCs are instructed not to contact the decedents' civilian family members or friends. They are instructed to complete the DONSIR using the best sources available within the 3- to 4-week time frame and to leave unknown items blank.

Decedents

Between 1999 and 2002, 261 active-duty personnel within the DON (USN: 165, USMC: 96) committed suicide. DONSIRs were received for all but 5 of the decedents, for an overall response rate of 98%. The Report of Casualty DD1300 required in the event of all active-duty deaths was available for those cases where DONSIRs were not received. Data from this form were used to supplement the DONSIR database so that information regarding demographics, military status, and the nature of the suicide act was complete for all 261 decedents.

	N	avy	Marin	e Corps
Year	Men	Women	Men	Women
1999	38	2	23	2
2000	41	2	20	2
2001	39	0	27	0
2002	41	2	22	0
Total	159	6	92	4

Table 1. Suicides in the Navy and the Marine Corps, 1999-2002

RESULTS

Suicide Rates

The average yearly suicide rate (suicides per 100,000 personnel) from 1999 to 2002 was 10.7 for the USN and 13.2 for the USMC. Figure 1 shows suicide rates for both services by year and for the total U.S. civilian population for available years. Rates for the USN were similar to the population figures during this time period. USMC rates were somewhat higher. However, demographically the DON includes a large percentage of personnel at high risk for suicide. In particular, suicide rates among men are substantially higher than they are among women and men are overrepresented in the military. As shown in Figure 1, estimated U.S. suicide rates ranged from 18.8 to 19.1 per 100,000 after adjusting them to approximate DON demographics for age, sex, and race-ethnicity (White, Black, Asian/Pacific Islander, American Indian/Alaskan Native, Hispanic).

Decedent Demographic Profile

The age, race, and gender characteristics of decedents were similar to the total DON population, as seen in Figures 2 through 4. There were no significant differences in relation to age. The percentages of men among DON decedents and, in particular, among USN decedents were significantly different from the population percentages, p < .001. Differences did not quite reach significance for the USMC, however this is likely due to insufficient statistical power given the smaller size of the population. The rate of suicide across the 4-year study period (1999-2001) was significantly higher among men than among women (see Appendix Table A) for both services (USN, p < .001; USMC, p < .05).

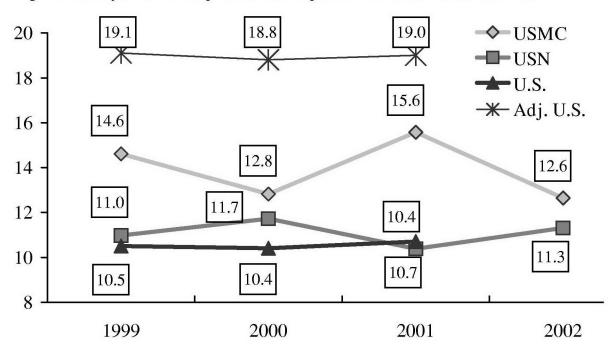


Figure 1. Navy^a, Marine Corps^b, and U.S. Population^c Suicides Rates, 1999–2002

Note, ^aBehavioral Health Section, Navy Personnel Command, PERS 601, ^bPrevention and Intervention Section, Marine Corps Community Services, Headquarters, USMC. National Center for Health Statistics (National Center for Health Statistics, 2004). *U.S. population suicide rates adjusted for DON demographics (race, sex, and age).

The percentage of White decedents was slightly higher than the DON population percentage, but this difference was not significant for the USN or the USMC, and there were no racial differences in suicide rates. In the U.S. population, suicide rates have been higher among persons who are White than among some minority groups, and particularly Blacks (Bennett & Collins, 2000; Bingham, Bennion, Openshaw, & Adams, 1994; Spicer & Miller, 2000). As can be seen in Appendix Table A, U.S. population suicide rates for minority groups were about half those for Whites. Among DON personnel rates were more comparable. Black Marines in particular had a slightly higher rate of suicide than did Whites. There is evidence from previous studies of suicide in the DON that some demographic subgroups may have higher suicide rates than their civilian counterparts (Hourani, Warrack, & Coben, 1997a, 1997b; Rothberg & Jones, 1987; Sentell, Lacroix, Sentell, & Finstuen, 1997).

USMC USN 100% 100% ■ Suicides Suicides 90% 90% 96% 96% 94% **■**Endstrength ■Endstrength 80% 80% 86% 70% 70% 60% 60% 50% 50% 40% 40% 30% 30% 14% 20% 20% 6% 4% 10% 10%

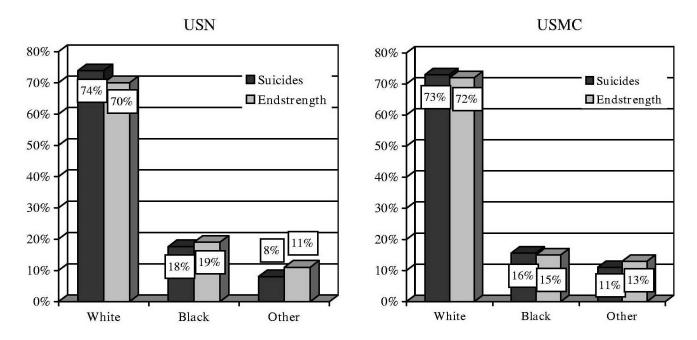
Figure 2. Gender of DON Suicide Decedents, 1999–2002

Figure 3. Race of DON Suicide Decedents, 1999–2002

Female

0% -

Male



0%

Male

Female

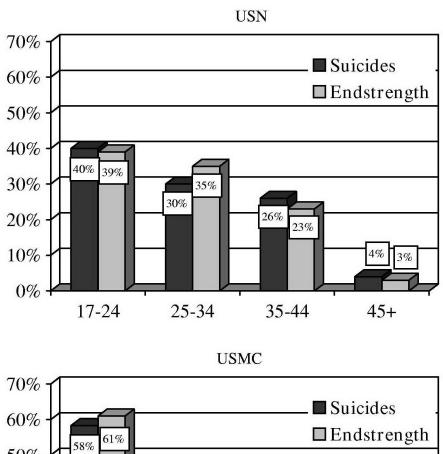


Figure 4. Age in Years of DON Suicide Decedents, 1999–2002

50% 40% 30% 29% 26% 20% 10% 0% 17-24 25-34 35-44 45+

Decedent Career Profile

Among DON personnel, the average rate of suicide for officers was 6.8 per 100,000, which was significantly less (p < .05) than the rate for enlisted personnel of 12.2 per 100,000 (USN, officer = 5.9, enlisted = 11.5; USMC, officer = 9.6, enlisted = 13.7). As would be expected given this finding, the percentage of officers among decedents was significantly lower (p < .05) than the percentage of officers in the population. Given the fact that enlisted personnel constitute 86% of the USN and 90% of the USMC, the great majority of decedents were enlisted (n = 241). There were no significant differences in suicide rates for the USN or the USMC based on regular/reserve status, length of service, or enlisted paygrade.

Figure 5. Officer/Enlisted Status of DON Suicide Decedents, 1999–2002

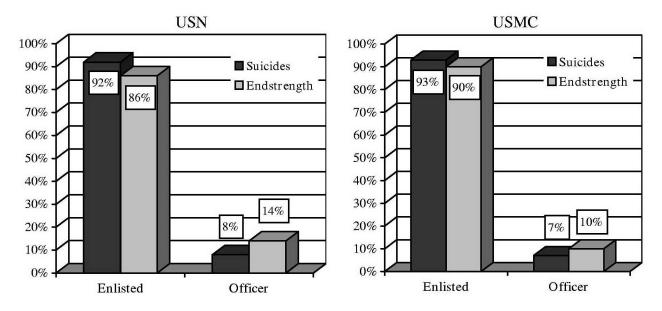


Figure 6. Regular/Reserve Status of DON Suicide Decedents, 1999–2002

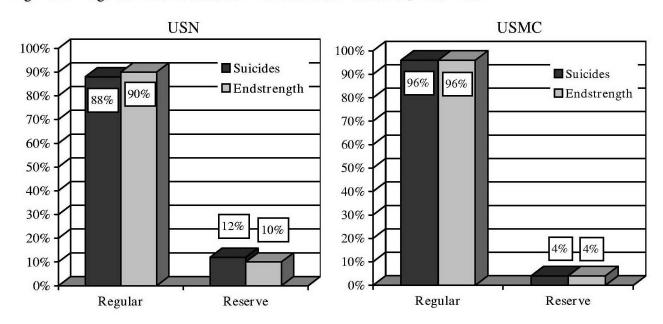
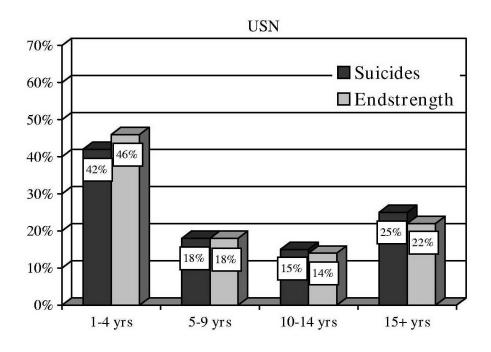
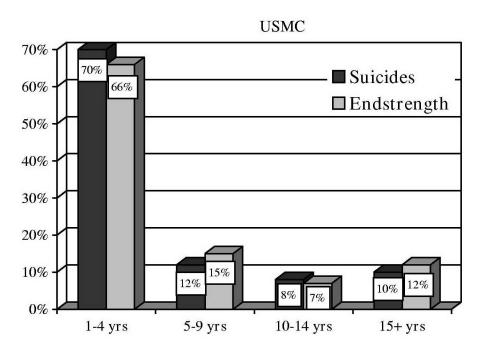


Figure 7. Years of Service at Time of Suicide, 1999–2002





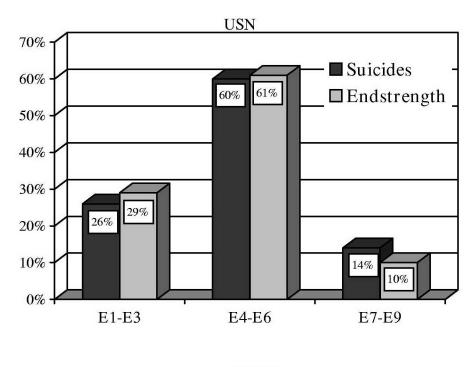
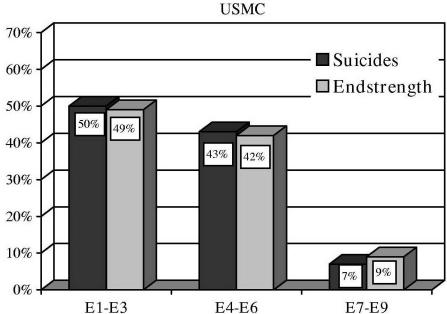


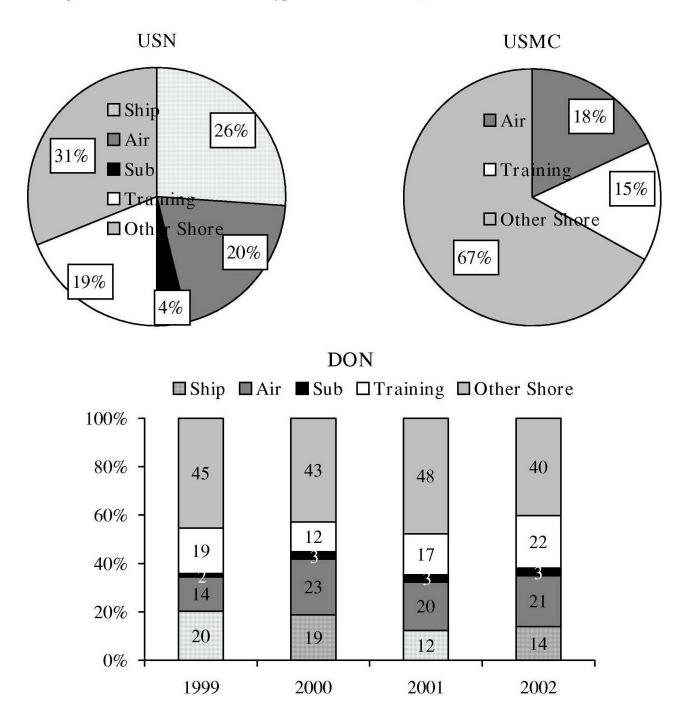
Figure 8. Paygrade of Enlisted DON Suicide Decedents, 1999–2002



Suicide Event Characteristics

Figures 9 through 13 describe characteristics of the completed suicides within the DON from 1999-2002. There were no significant differences in duty status at time of suicide, method of suicide, location of suicide, or use of alcohol, comparing USN with USMC personnel or comparing decedents across calendar years.

Figure 9. Decedents' Command Type at Time of Suicide, 1999–2002



There was a significant service difference (p < .001) in the type of command to which decedents were assigned. However, this was due to the fact that USMC personnel are not assigned to ships or submarines. As can be seen in Figure 9, shore commands were most common for all DON decedents.

9

19

2002

USN USMC 10% 11% 11% 17% □ Duty 11% □ Duty 7% □Liberty □Liberty **■**Leave **■**Leave 65% 68% DON Duty ■ UA **□**Liberty **■** Leave 100% 9 12 11 12 80% 60% 63 66 67 71 40%

Figure 10. Decedents' Duty Status at Time of Suicide, 1999–2002

20%

0%

11

11

1999

At the time of suicide, most DON decedents were on liberty (see Figure 10). Data regarding deployment at time of suicide was only available for 2000 and 2001, but during those 2 years few suicides had occurred on deployment, with no significant differences by service (USN, 5%; USMC, 4%, N = 130). However, more USN than USMC decedents had experienced deployments in the 3 years prior to suicide (USN, 47%; USMC, 28%; p < .01, N = 261).

12

9

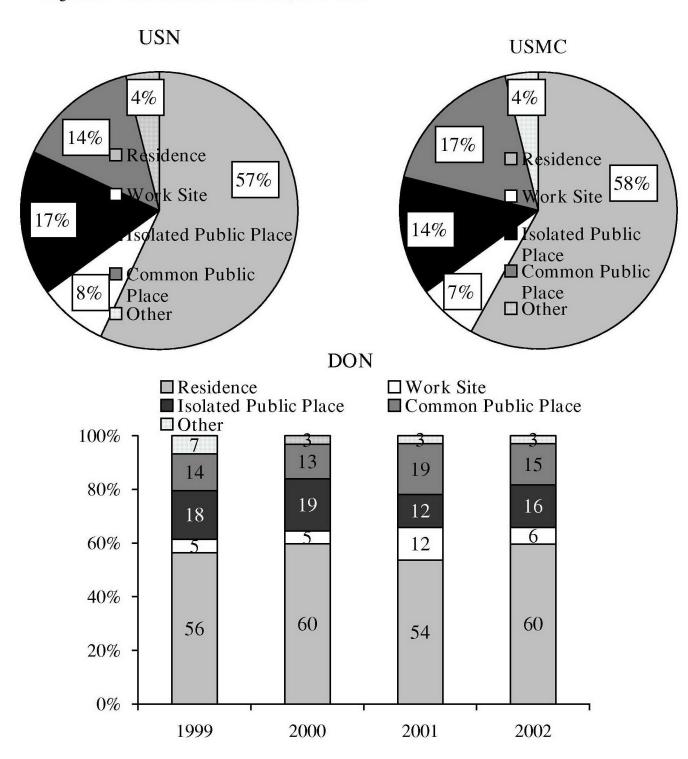
2000

6

12

2001

Figure 11. Location of Suicide Event, 1999–2002

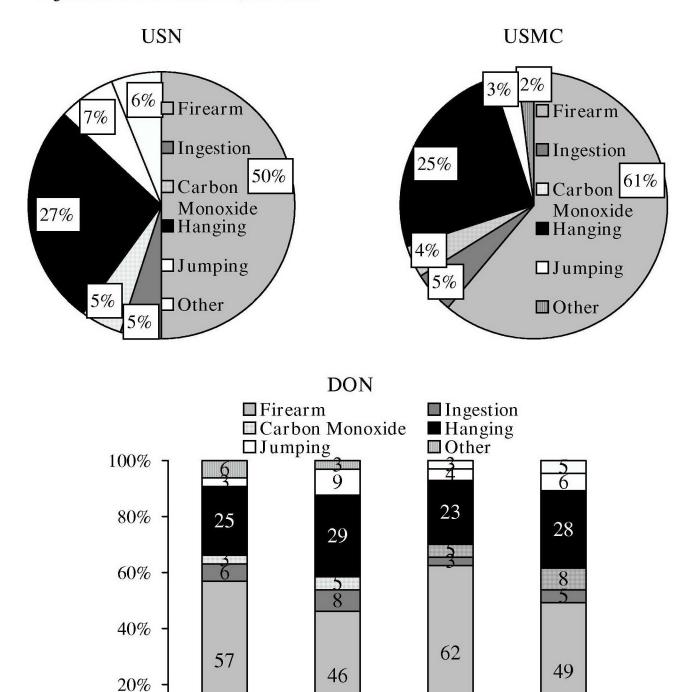


Most often, decedents chose to commit suicide in their own or someone else's private residence (see Figure 11).

Figure 12. Method Of Suicide, 1999–2002

0%

1999



2000

2001

2002

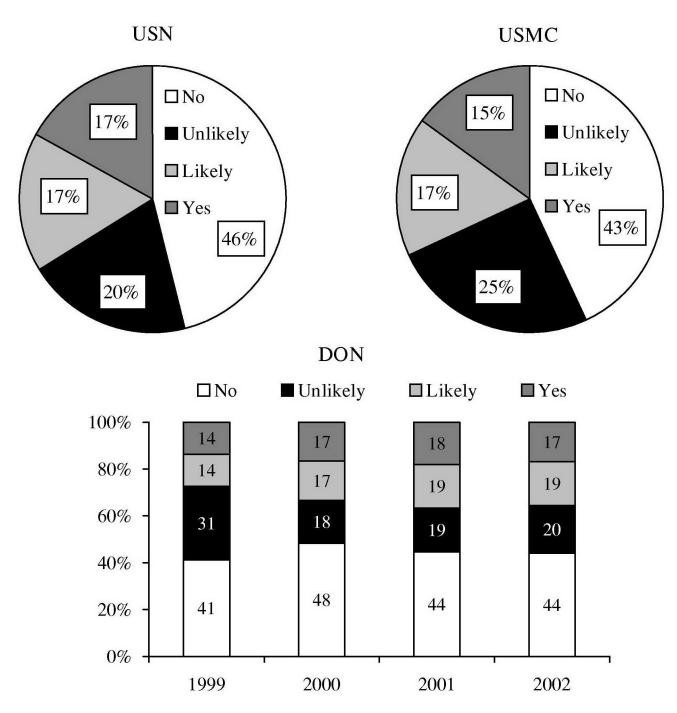
The most common method of suicide was the use of a firearm, followed by hanging. These two methods accounted for 86% of USMC suicides and 77% of USN suicides (Figure 12). In a previous report, we noted a significantly higher percentage of USMC than USN personnel had used a firearm (Stander et al., 2004). Although a trend in this direction could still be seen in the data, the difference was no longer significant. Still, decedents who were aboard ships or on other government property at the time of their suicide were less likely to use a firearm and more likely to choose hanging (see Table 2, p < .001). Access to firearms is restricted on military ships and installations, and this is most likely the reason for this pattern.

Table 2. Method of Suicide Among All Decedents, 1999–2002, by Military vs. Nonmilitary Location of Suicide

		Method	
Location	Firearm	Hanging	Other
Nonmilitary	65%	15%	20%
Military	32%	47%	21%

Note. N = 261.

Figure 13. Use of Alcohol at Time of Suicide, 1999–2002



In general, POCs reported that decedents were not drinking alcohol at the time of suicide or that it was at least unlikely alcohol was involved (USN, 66%; USMC, 68%, see Figure 13). However, in 34% of the cases for the USN and 32% for the USMC, alcohol was involved or was likely involved.

Risk Factors for Suicide

The DONSIR asked POCs if there was any evidence that decedents had experienced a number of problems that might have precipitated their choice to commit suicide. These included 26 key risk factors and 14 possible associated stressors.

Key Risk Factors. The 26 key risk factors for suicide assessed by the DONSIR can be summarized in four categories: (a) mental health history, (b) recent emotional state, (c) recent changes in affect or behavior, and (d) self-destructive or aggressive behavior (see Appendix Table B). Overall, POCs noted evidence of 4 to 5 (M = 4.49) different key risk factors per decedent, with no significant differences by service in total numbers (USN,: M = 4.55; USMC, M = 4.35). There was also little difference by service in the number of instances that POCs indicated each of the 26 risk factors individually was an issue for decedents. We found only one marginally significant relationship for recent feelings of loneliness (USMC, 7%; USN, 18%; p =.03). Given the number of comparisons conducted, this is still likely to be due to chance. The key risks that were most commonly noted in the DONSIR were depression, a history of mental health problems, feelings of anxiety, feelings of guilt, and evidence of alcohol abuse within the previous year (see Figure 14).

Associated Stressors. The 14 associated stressors explored by the DONSIR were all contextual problems that may have contributed to suicide, such as relationship loss, work problems, and legal or disciplinary difficulties (see Appendix Table C). POCs noted evidence of about three different contextual stressors (M = 3.06) for each decedent, again with no overall significant differences by service (USN, M = 3.11; USMC, M = 2.98). Furthermore, there were no significant differences by service in the percentage of decedents for whom each of the 14 stressors was indicated. The five most commonly noted were problems in a primary romantic relationship, physical health problems, job dissatisfaction, other work issues such as poor performance, and pending military legal or disciplinary action (see Figure 15).

As might be expected, the total numbers of key risk factors and associated stressors reported were correlated (r = .40, p < .001). Those with the most key risks tended to have the most associated stressors. Table 3 and Figure 16 illustrate this relationship and also highlight the level of skewness in the distribution. Considering both types of factors together, POCs noted 10 or more indicators for suicide among a third of the decedents (32%).

Figure 14. Most Common Key Risk Factors for Suicide Reported for DON Decedents, 1999-2002

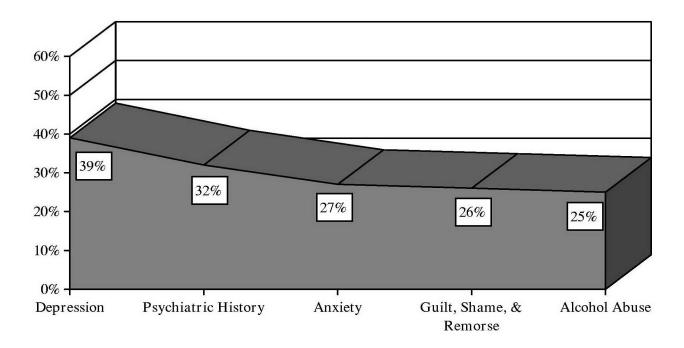


Figure 15. Most Common Associated Stressors Experienced by DON Decedents, 1999–2002

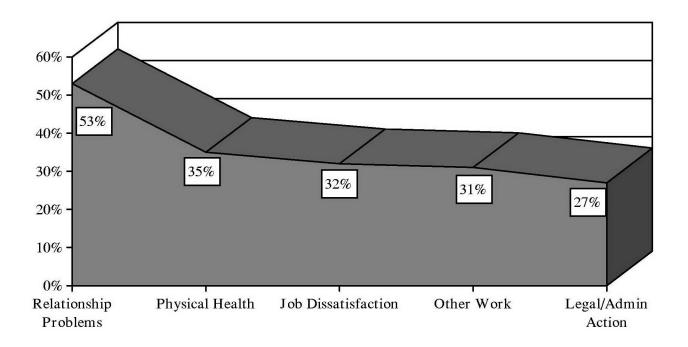
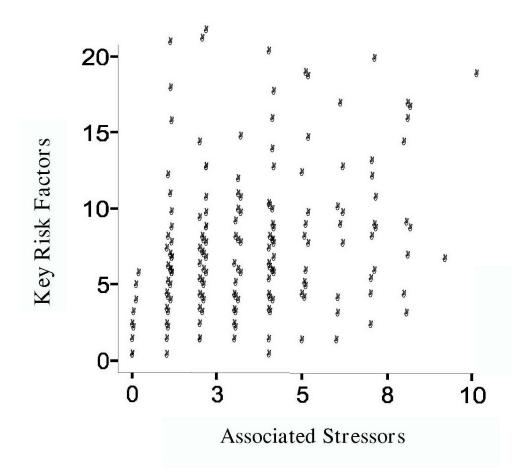


Table 3. Most Common Key Risk Factors for Suicide Reported for DON Decedents, 1999–2002

	Key Risk Factors				
Stressors	None	1 to 2	3 to 4	5 to 6	7 plus
None	11 (5%)	9 (4%)			
1 to 2	12 (5%)	34 (15%)	17 (8%)	7 (3%)	15 (7%)
3 to 4	3 (1%)	19 (9%)	18 (8%)	7 (3%)	22 (10%)
5 to 6		6 (3%)	6 (3%)	2 (<1%)	11 (5%)
7 plus		1 (<1%)	6 (3%)	6 (3%)	10 (5%)

Note. Due to missing data, N = 222.

Figure 16. Association Between Key Risk Factors and Associated Stressors for DON Decedents, 1999-2002



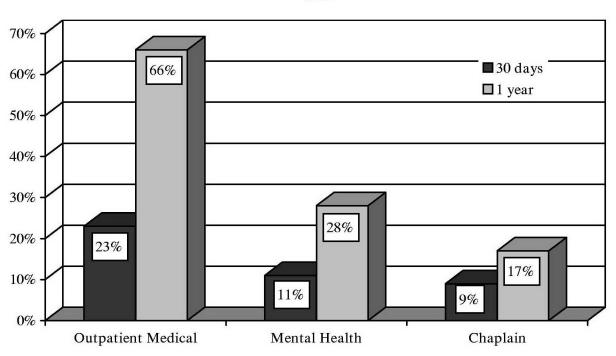
Recent Service Use

POCs were asked to report whether there was evidence decedents had accessed professional support services within the year prior to their suicides or within the last 30 days. The percentages of decedents that used any of 11 different types of support services are shown in Appendix Table D. Within their last 30 days, 66% had not accessed any of these services (USN, 64%; USMC, 70%). Within the previous year, decedents had used between 1 and 2 on average (USN, M = 1.73; USMC, M = 1.81). There were no significant differences in the number of support services accessed comparing USMC and USN decedents, and there was only one significant difference between USMC and USN personnel in percentages using any specific type of service. Significantly more USMC (15%) than USN (4%) personnel had used financial services in the previous year (p < .01). There were no significant service differences for the past 30 days.

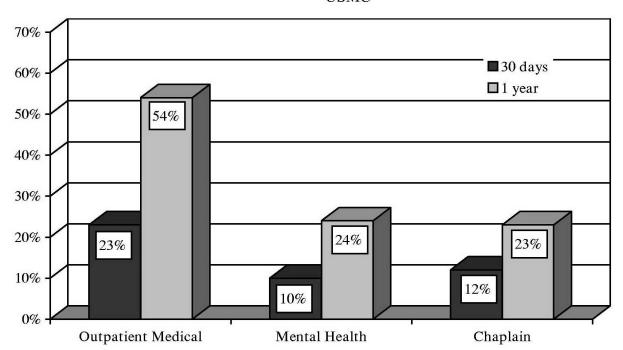
The most common type of service used in the 30 days prior to suicide was outpatient medical care (see Figure 17). There were 23% of both USN and USMC decedents who were seen at outpatient medical facilities within 30 days of suicide. Only 11% of USN decedents and 10% of USMC personnel had visited a mental health professional in their last 30 days, and about the same percentages (USN, 9%; USMC, 12%) had seen a chaplain.

Figure 17. Recent Use of Support Services Among DON Decedents, 1999–2002









DISCUSSION

The purpose of this report was to summarize 4 years of suicide surveillance using the DON Suicide Incident Report. As might be expected, most decedents were male. Enlisted personnel were disproportionately represented among DON suicides, while age and race were not strongly related to differences in suicide rates. Suicides generally occurred outside the military work environment and involved the use of a firearm. The most common risk factors included depression and anxiety, serious relationship problems, alcohol abuse, and other common emotional and behavioral correlates of depression, such as feelings of guilt and failure. We did not find many notable differences in suicide characteristics comparing the USN with the USMC or comparing decedents across calendar years. This suggests that patterns of suicide are quite similar throughout the DON.

The results suggest several directions for future suicide prevention and research efforts:

- 1. On average, decedents had struggled with three different situational stressors within the year prior to suicide, and there was evidence they had experienced four to five key risk factors. This suggests that the DON suicide risk-response training should continue to target personnel with multiple acute risk factors in evaluating suicide risk.
- 2. Although they were dealing with multiple problems, the majority of decedents had not made use of mental health or any other support services in the 30 days prior to suicide. Promoting available services may encourage persons at risk for suicide to obtain support. Specifically, any person exhibiting symptoms of depression and anxiety should be evaluated for treatment.
- 3. Assisting military personnel who are coping with relationship problems should be a priority. More than half the DON personnel who committed suicide between 1999 and 2002 were facing a serious relationship problem such as separation or divorce, and relationship problems have consistently been cited as a primary stressor in research on suicide among military personnel (Hourani & Hilton, 1999; Hourani et al., 2000; Hourani et al., 2001; Rothberg & Jones, 1987; Rothberg & McDowell, 1988).
- There was evidence that about a third of decedents were dissatisfied with their jobs or were having other types of work problems. It is difficult to estimate how much more or less common general job dissatisfaction was among decedents in comparison with military personnel in general. However, stressors such as high operational tempo,

- uncertainty about the future, and the timing of career transitions may play a role, and these factors could be evaluated more thoroughly in relation to suicide.
- 5. It would be helpful to explore suicide rates for personnel living in military housing where firearms are prohibited and personnel assigned to ships or submarines where lethal suicide methods are even more restricted. In this study, we found evidence that choice of method in completed suicide may be affected by access to firearms. An earlier study of suicide attempts aboard an aircraft carrier also noted that choice of method most likely is affected by restricted access to weapons or drugs (Bohnker, McEwen, Blanco, & Feeks, 1992). Because it is difficult to obtain accurate endstrengths for all personnel living on military property or onboard ships, it is difficult to estimate whether restricted access to lethal methods can reduce suicide rates. However, there are some historical data that suggest this may be possible, and the possibility could be explored further (Clarke & Lester, 1987; Schapira, Linsley, Linsley, Kelly, & Kay, 2001).
- 6. A history of suicide attempts was one of the common behavioral risk factors for suicide noted among decedents. POCs found evidence of a history of attempts or gestures for 20% of the decedents. It is difficult to determine how important previous attempts are in predicting subsequent suicide, because data on attempts throughout the DON are not systematically collected by the DONSIR. Furthermore, studies of suicide attempts have come to conflicting conclusions about how well they predict completed suicide (Hall, Platt, & Hall, 1999; Ritchie, Keppler, & Rothberg, 2003; Suokas, Suominen, Isometsa, Ostamo, & Lonnqvist, 2001). Future research on attempts as a risk factor for suicide and as a challenge to military readiness could be helpful.

The DONSIR allows the DON to analyze patterns in completed suicides over time (Hourani & Hilton, 1999; Hourani et al., 2000; Hourani et al., 2001) It provides the DON with consistent data that can be compared across both the USN and the USMC. It also evaluates military-specific correlates of suicide, which cannot be evaluated using civilian, academic literature. The DONSIR's focus on military-specific risk factors is important because military personnel are not representative of the U.S. population. Differences in gender, race, age, health, and employment may be related to unique correlates of suicide among active-duty personnel. The structure of the military may also facilitate initiating policies and procedures to address risk factors that cannot be addressed among civilians.

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APPENDICES

Table A. Average Suicide Rates (1999–2002) Per 100,000 in the Navy and the USMC by Demographic Group

Demographic Group	Navy	Marine Corps	U.S. Population
Age in years			
15-19	10.6	11.6	8.0
20-24	11.3	13.0	12.3
25-34	9.2	14.9	12.3
35-44	12.4	14.8	14.5
45-54	11.5	0.0	14.5
Gender			
Male	12.0	13.5	17.3
Female	2.8	9.4	4.0
Race			
White	11.5	13.5	11.6
Black	9.8	13.7	5.3
All other	8.2	11.7	6.4
Military status			
Officer	5.9	9.6	NA
Enlisted	11.5	13.7	NA
Regular	10.6	13.2	NA
Reserve	11.8	15.1	NA

Note. NA, not applicable. Military figures are average rates (1999-2002) calculated using endstrengths from USN and USMC personnel data. U.S. population data by demographic group are rates from 1999 to 2001 (National Center for Health Statistics, 2004). U.S. rates by subpopulation for 2002 are not yet available.

Table B. Key Risk Factors Reported for Decedents on the DONSIR, 1999–2002

Indicator	USN	USMC	DON	
Mental Health History				
Psychiatric history	32%	32%	32%	
2. Evidence of alcohol misuse in the last year	29%	18%	25%	
History of suicide attempts or gestures	20%	19%	20%	
4. History of drug use/abuse	14%	23%	17%	
Total mental health history	57%	52%	55%	
Recent E	motional State			
5. Depression	39%	38%	39%	
6. Anxiety	27%	27%	27%	
7. Guilt, shame, remorse	28%	23%	26%	
8. Sense of failure	20%	25%	22%	
9. A desire to be free of problems	22%	18%	21%	
10. A desire to die	18%	18%	18%	
11. Hopelessness or uselessness	16%	20%	18%	
12. Isolation	17%	11%	15%	
13. Loneliness	18%	7%	14%	
14. Powerlessness	14%	16%	14%	
15. Lack of interest in usual activities	9%	14%	10%	
16. Feeling burdensome to others	9%	13%	10%	
Total recent emotional state	66%	59%	64%	

Table B Continued... Key Risk Factors Reported for Decedents on the DONSIR, 1999–2002

Indicator	Navy	Marine Corps	DON
Recent Chan	ge in Affect or Bel	navior	
17. Change in usual mood	25%	20%	23%
18. Change in sleep patterns	16%	13%	15%
19. Change in weight	11%	14%	12%
20. Change in eating patterns	12%	9%	11%
21. Poorer work performance	11%	11%	11%
Total recent changes	40%	35%	39%
Self-Destructiv	e or Aggressive B	ehavior	
22. Arranging affairs	18%	13%	16%
23. Impulsivity	13%	10%	12%
24. Self-deprecation	10%	9%	9%
25. Aggressive behavior	8%	10%	8%
26. Self-mutilation	5%	4%	5%
Total destructive behavior	40%	30%	37%

Note. Due to missing data, N's vary from 222–250 (USN, 151–160; USMC, 71–90).

Table C. Associated Stressors Reported For Decedents, 1999–2002

Stressor	Navy	USMC	DON	
Relationship	Problems			
Recent romantic relationship problem	56%	49%	53%	
2. Domestic violence/sexual abuse	11%	4%	9%	
3. Recent death of family/friend	9%	7%	8%	
Total relationship problems	61%	53%	58%	
Disciplinary/Le	egal Problems			
4. Military legal/admin action	26%	29%	27%	
5. Discipline/conflict with authority	22%	28%	24%	
6. Civil legal difficulties	17%	20%	18%	
7. Under criminal investigation	14%	9%	12%	
Total disciplinary/legal problems	41%	47%	43%	
Work-Relate	ed Problems			
8. Job dissatisfaction	32%	32%	32%	
9. Other work	29%	36%	31%	
10. Job stress	19%	16%	18%	
11. Job loss	16%	11%	14%	
Total work-related problems	51%	51%	51%	
Other				
12. Physical health	34%	35%	35%	
13. Financial	18%	19%	18%	
14. School	11%	7%	9%	
Total other problems	53%	51%	52%	

Note. Due to missing data, N's vary (233-250) (USN, N = 151-160; USMC, N = 82-90).

Table D. Service Use Within 1 Year And Within 30 Days Preceding Suicide For All Decedents, 1999–2002

	N	avy	Marine	e Corps
Support Service	1 Year	30 Days	1 Year	30 Days
Outpatient, military facility	66%	24%	54%	23%
Inpatient, civilian facility	8%	3%	15%	6%
Inpatient, military facility	19%	5%	18%	4%
Total medical service use	67%	26%	61%	27%
Mental health counseling	28%	11%	24%	10%
Substance abuse counseling	11%	3%	8%	4%
Anger management	3%	0%	5%	0%
Stress management	5%	2%	5%	0%
Total mental health service use	33%	13%	26%	11%
Exceptional family member	6%	3%	6%	1%
Family advocacy	7%	4%	6%	2%
Chaplain service	17%	9%	23%	12%
Financial counseling	4%	1%	15%	1%
Total other service use	28%	16%	30%	12%

Note. Due to missing data, N = 231 (USN = 149, USMC = 82).

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1. Report Date (DD MM YY) 03 May 2004	2. Report Type Interim	3. DATES COVERED (from - to) January 1999 – December 2002
4. TITLE AND SUBTITLE Department of the Navy Suice 2002 Findings	5a. Contract Number: 5b. Grant Number:	
6. AUTHORS Valerie A. Stander, Ph.D.; Stander, CDR, USN	5c. Program Element: Reimbursable) 5d. Project Number:	
7. PERFORMING ORGANIZATION Naval Health Research Cent P.O. Box 85122 San Diego, CA 92186-5122	5e. Task Number: 5f. Work Unit Number: 6821 9. PERFORMING ORGANIZATION REPORT	
8. SPONSORING/MONITORING A Chief, Bureau of Medicine a Code M2	NUMBER Report No. 04-19	
2300 E St NW Washington DC 20372-5300		10. Sponsor/Monitor's Acronyms(s) HQ USMC, Naval Personnel Command 11. Sponsor/Monitor's Report Number(s)

12 DISTRIBUTION/AVAILABILITY STATEMENT

Approved for public release; distribution unlimited.

13. SUPPLEMENTARY NOTES

14. ABSTRACT (maximum 200 words)

Since 1999, the Department of the Navy (DON) has conducted an extensive suicide surveillance program, using the DON Suicide Incident Report (DONSIR) to collect data on completed suicides in the U.S. Navy (USN) and Marine Corps (USMC). The long-term goal of this program is to improve suicide prevention by identifying and modifying military-specific risk factors. The DONSIR significantly improves the capability of the DON to track and analyze data on completed suicides. It provides the DON with consistent data that can be compared across both the USN and the USMC. It establishes baselines for suicide rates and suicide event characteristics that can be used to track trends over time. It also evaluates military-specific correlates of suicide, which cannot be evaluated using civilian, academic literature. This is the fourth annual report on the DONSIR. This report presents findings from the first 4 years of data collected since the program was initiated in 1999 and summarizes the conclusions and recommendations that can be drawn based on the results to date.

15. SUBJECT TERMS suicide, suicide prevention, suicide assessment in the military, Navy, Marine Corps, incidence, registries, risk factors, epidemiology 16. SECURITY CLASSIFICATION OF: 17. LIMITATION 18. NUMBER 19a. NAME OF RESPONSIBLE PERSON OF ABSTRACT OF PAGES Commanding Officer a. REPORT b.ABSTRACT c. THIS PAGE 19b. TELEPHONE NUMBER (INCLUDING AREA CODE) 33 **UNCL UNCL** UNCL **UNCL** COMM/DSN: (619) 553-8429